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CENTRAL FAX CENTER

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Application No. 10/815,243

AMENDMENTS TO THE SPECIFICATIONIn the Specification

Please substitute the following amended paragraph(s) and/or section(s) (deleted matter is shown by strikethrough and added matter is shown by underlining):

Page 14, lines 7-18

UV light absorbers can absorb ultraviolet radiation and dissipate it as heat. UV light inhibitors are thought to trap free radicals generated by the ultraviolet light and after trapping of the free radicals, subsequently to regenerate active stabilizer moieties with energy dissipation. In view of the synergistic relationship of the UV stabilizers with electron transport compounds, the particular advantages of the UV stabilizers may not be their UV stabilizing abilities, although the UV stabilizing ability may be further advantageous in reducing degradation of the organophotoreceptor over time. The improved synergistic performance of organophotoreceptors with layers comprising both an electron transport compound and a UV stabilizer are described further in copending U.S. Patent Application Serial Number 10/425,333, now Application Publication Number 2003/0228534 A1, filed on April 28, 2003 to Zhu, entitled "Organophotoreceptor With A Light Stabilizer," incorporated herein by reference.

Page 18, lines 12-24

In general, any layer with an electron transport layer can advantageously further include a UV light stabilizer. In particular, the electron transport layer generally can comprise an electron transport compound, a binder, and an optional UV light stabilizer. An overcoat layer comprising an electron transport compound is described further in ~~copending~~ U.S. Patent Application Serial No. 10/396,536 Number 6,890,693 to Zhu et al. entitled, "Organophotoreceptor With An Electron Transport Layer," incorporated herein by reference. For example, an electron transport

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compound as described above may be used in the release layer of the photoconductors described herein. The electron transport compound in an electron transport layer can be in an amount from about 10 to about 50 weight percent, and in other embodiments in an amount from about 20 to about 40 weight percent, based on the weight of the electron transport layer. A person of ordinary skill in the art will recognize that additional ranges of compositions within the explicit ranges are contemplated and are within the present disclosure.

Page 20, line 25-page 21, line 3

An overcoat layer may comprise an electron transport compound as described further in ~~depending U.S. Patent Application Serial No. 6,890,693~~ 10/396,536, filed on March 25, 2003 to Zhu et al. entitled, "Organoreceptor With An Electron Transport Layer," incorporated herein by reference. For example, an electron transport compound, as described above, may be used in the release layer of this invention. The electron transport compound in the overcoat layer can be in an amount from about 2 to about 50 weight percent, and in other embodiments in an amount from about 10 to about 40 weight percent, based on the weight of the release layer. A person of ordinary skill in the art will recognize that additional ranges of composition within the explicit ranges are contemplated and are within the present disclosure.

Page 21, lines 16-30

The charge transport materials as described herein, and photoreceptors including these compounds, are suitable for use in an imaging process with either dry or liquid toner development. For example, any dry toners and liquid toners known in the art may be used in the process and the apparatus of this invention. Liquid toner development can be desirable because it offers the advantages of providing higher resolution images and requiring lower energy for image fixing compared to dry toners. Examples of suitable liquid toners are known in the art. Liquid toners generally comprise toner particles dispersed in a carrier liquid. The toner particles can comprise a colorant/pigment, a resin binder, and/or a charge director. In some embodiments

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of liquid toner, a resin to pigment ratio can be from 1:1 to 10:1, and in other embodiments, from 4:1 to 8:1. Liquid toners are described further in Published U.S. Patent Application[[s]] 2002/0128349, entitled "Liquid Inks Comprising A Stable Organosol," and U.S. Patent No. 6,828,358 ~~2002/0086916~~, entitled "Liquid Inks Comprising Treated Colorant Particles," and U.S. Patent No. 6,649,316, entitled "Phase Change Developer For Liquid Electrophotography," all three of which are incorporated herein by reference.

Page 24, lines 6-18

A First General Synthetic Procedure for Charge Transport Materials of Formula (I)

For some charge transport materials of Formula (I), the first step is the preparation of an arylamine compounds having two reactive ring groups and two aromatic hydrazone groups, such as 9-ethylcarbazole-3,6-dicarbaldehyde bis(N-2,3-epoxypropyl-N-phenyl)hydrazone and 4,4'-diformyltriphenylamino-bis(N-2,3-epoxy-propyl-N-phenylhydrazone). The reactive ring group can react with a reactive functional group such as hydroxyl, thiol, amino group, and carboxyl group. Non-limiting examples of suitable reactive ring group include epoxy group, thiiranyl group, or aziridino group. The preparations of such arylamine compounds have been disclosed in U.S. Patent No. 7,029,812, ~~Application Nos. 10/634,164~~, U.S. Patent Application Publication No. 2004/0161685 A1, ~~10/772,068~~, and U.S. Patent No. 7,014,968 ~~10/749,178~~, all of which are incorporated herein by reference. The reactive ring groups have been disclosed in U.S. Patent Application Publication Nos. 2004/0191655 and 2005/0191570 A1, ~~10/772,069, 10/789,077, and 10/789,184~~, U.S. Patent No. 7,011,918, all of which are incorporated herein by reference.

Page 24, lines 19-31

The second step is the preparation of an (N,N-disubstituted)hydrazone of an aromatic aldehyde or ketone having an (N,N-disubstituted)amino group and, on the aromatic ring, a reactive functional group that can react with the reactive ring group. Non-limiting examples of the functional group are hydroxyl, thiol, amino group, and carboxyl group. The (N,N-

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disubstituted)hydrazone can be prepared, for example, by the reaction of a corresponding aromatic aldehyde or ketone having a functional group, such as 4-diethylamino-2-hydroxybenzaldehyde, with a corresponding (N,N-disubstituted)hydrazine, such as N,N-diphenylhydrazine, in refluxing ethanol. The reaction can be catalyzed by an appropriate amount of concentrated acid, such as sulfuric acid and hydrochloric acid. The preparation of such (N,N-disubstituted)hydrazones of an aromatic aldehyde or ketone having an (N,N-disubstituted)amino group and, on the aromatic ring, a functional group has been disclosed in U.S. Patent Application Publication No. 2004/0157145 A1, 10/749,164, which is incorporated herein by reference.

Page 25, lines 1-21

The next step is the reactive-ring-opening reaction of an arylamine compound obtained in the first step with at least an (N,N-disubstituted)hydrazone obtained in the second step. If a symmetrical charge transport material of Formula (I) is desired, one part by mole of the arylamine compound may react with 2 parts by mole of the (N,N-disubstituted)hydrazone. The reaction can be catalyzed by an appropriate amount of concentrated acid, such as sulfuric acid and hydrochloric acid. If an unsymmetrical charge transport material of Formula (I) is desired, an unsymmetrical arylamine compound obtained in the first step may be used. Such unsymmetrical arylamine compounds having two reactive ring groups and two aromatic hydrazone groups have been disclosed in U.S. Patent Application Publication No. 2004/0161685 A1 10/772,068 and U.S. Patent No. 7,014,968 10/749,178, all of which are incorporated herein by reference. Alternatively, unsymmetrical charge transport materials of Formula (I) may be prepared by reacting an arylamine compound obtained in the first step sequentially with two (N,N-disubstituted)hydrazones obtained in the second step, either sequentially or simultaneously. The molar ratio of the three reactants may be 1:1:1. The reaction conditions can be selected to encourage the formation of the asymmetric compound, such as the sequential reaction with a greater than stoichiometric amount of an (N,N-disubstituted)hydrazone used in the first sequential reaction. To the extent that a mixture of symmetric and asymmetric compounds is formed, the different compounds can be separated

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from each other, for example, by conventional purification techniques, such as column chromatography, thin layer chromatography, and recrystallization.

Page 25, line 23-page 26, line 5

An Alternative General Synthetic Procedure for Charge Transport Materials of Formula (I)

The first step is the preparation of an arylamine compound having two reactive functional groups such as hydroxyl, thiol, amino group, and carboxyl group. Such arylamine compounds may be prepared, for example, by the dicarbonylation, such as diformylation, of an arylamine compound, such as carbazole or triphenylamine, to form a dicarbonyl-arylamine compound, and followed by the reduction of the dicarbonyl-arylamine compound to the corresponding dihydroxy-arylamine compound by a reducing agent, such as hydrogen, metal, or metal hydrides. The preparation of the dicarbonyl-arylamine compounds, such as N-ethyl-3,6-diformylcarbazole and 4-(4-formyldiphenylamino)benzaldehyde, have been disclosed in U.S. Patent Application Nos. ~~10/634,164, 10/772,068, and 10/749,178~~, Nos. 7,029,812 and 7,014,968, and U.S. Patent Application Publication No. 2004/0161685 A1, all of which are incorporated herein by reference. The reduction of carbonyl compounds is described in Carey et al., "Advanced Organic Chemistry, Part B: Reactions and Synthesis," New York, 1983, pp. 193-239, which is incorporated herein by reference.